

Subject: Numerical Ability

1. 161. In an examination, a student scores 6 marks for every correct answer and loses 4 marks for every wrong answer. If he attempted 80 questions and obtained 310 marks, how many questions did he attempted correctly?

- (1) 59
- (2) 67
- (3) 63
- (4) 65
- (5) 61

2. The diameter of a wheel is 49 m. How many revolutions will it make to cover a distance of 3200 m?

- (1) 17
- (2) 27
- (3) 24
- (4) 22
- (5) 18

3. The average run of a cricketer after 18 matches was 56.5. If he made 101 runs and 123 runs in 19th and 20th match respectively. What is his new average run after 20th match?

- (1) 62.05

- (2) 64.45
- (3) 60.75
- (4) 61.25
- (5) 63.85

4. Two types of rice (type 1 and type 2) were mixed in the respective ratio of 1 : 3. The mixture was then sold @ 75.60 per kg to gain a profit of 20%. If the price of type 1 rise is Rs. 75 per kg, what is the price of type 2 price per kg?

- (1) Rs. 55
- (2) Rs. 53
- (3) Rs. 59
- (4) Rs. 57
- (5) Rs. 62

5. Mr. Shah's monthly income is Rs. 54550. In an entire year, he spends 32% of his annual salaries on groceries, he spend 12% on repairs and 10% he pays to his servant. If half of the remaining amount he invests in fixed deposits, what is the amount invested by him in fixed deposits?

- (1) Rs. 150558
- (2) Rs. 155240
- (3) Rs. 152610
- (4) Rs. 158789
- (5) Rs. 154336

6. Two pipes A and B can fill a tank in hours when opened simultaneously. If B alone can takes 2 hours less than A alone takes to fill the tank completely. How much does A

alone take to fill the tank?

- (1) 8 h
- (2) 12 h
- (3) 4 h
- (4) 6 h
- (5) 10 h

7. A man can row 10.2 km downstream in 18 minutes. If the speed of the stream is 3.5 km/h, how much time he would take to cover 121.5 km upstream? (in hours)

- (1) $4\frac{2}{1}$
- (2) 3
- (3) 4
- (4) $5\frac{1}{2}$
- (5) $3\frac{1}{2}$

8. The respective ratio of two numbers is 16 : 21. If the first number is increased by 30% and the second number is decreased by 20%, what will be the respective ratio of the first and the second number?

- (1) 32 : 21
- (2) 26 : 21
- (3) 25 : 21
- (4) 20 : 21

(5) 22 : 21

9. A bag of fruits was distributed among 4 students P, Q, R and S. P took $\frac{3}{8}$ th of the fruits. Q took $\frac{1}{5}$ th of the remaining fruits and the remaining fruits were equally distributed among R and S. What fraction of fruits did R get?

- (1) $\frac{1}{4}$ (2) $\frac{3}{8}$
(3) $\frac{1}{8}$ (4) $\frac{5}{16}$
(5) Other than those as options

10. The present population of village P is 2.5 time the present population of village Q. If after a year the population of village Q is 16537 and has been increased at a rate of 15%. What is the present population of village P?

- (1) 34740
(2) 38560
(3) 36820
(4) 35950
(5) 30350

Directions (Q. Nos. 11-15): What will come in place of question mark (?) in the given number series?

11. 29 31 37 49 69 ?

- (1) 108
- (2) 99
- (3) 94
- (4) 103
- (5) 88

12. 13 13 20 37.5 83 ?

- (1) 233
- (2) 216
- (3) 234
- (4) 235
- (5) 239

13. 17 16 30 87 344 ?

- (1) 1735
- (2) 1760
- (3) 1660
- (4) 1685
- (5) 1715

14. 8 94 12.2 17.8 29 ?

- (1) 53.6
- (2) 51.4
- (3) 52.1
- (4) 48.6
- (5) 49.8

15. 26 12 11 15.5 30 ?

- (1) 72
- (2) 68
- (3) 74
- (4) 82
- (5) 78

16. Arunika brought some articles and sold half of them at Rs. 22103 thereby making a profit of 15%/ At what price should sell the rest of them so as to earn a total profit of 25%?

- (1) Rs. 25947
- (2) Rs. 23528
- (3) Rs. 27130
- (4) Rs. 24682
- (5) Rs. 26240

17. The height of a triangle is equal to the perimeter of a square whose diagonal is m and the base of the same triangle is equal to the side of the square whose area is 784 m^2 . What is the area of the triangle? (in m^2)

- (1) 504
- (2) 558
- (3) 478
- (4) 522
- (5) 496

18. Arunavo invested total sum of Rs. 16000 in two schemes (A and B) for two years. Scheme A offers compound interest (compounded annually) at the rate of 10% per annum and scheme B offers simple interest at the rate of 12% per annum. If the total interest earned by him from both the schemes after two years is Rs. 3504. How much money (principle) did he invest in scheme B?

- (1) Rs. 4800
- (2) Rs. 4200
- (3) Rs. 4600
- (4) Rs. 4400
- (5) Rs. 5200

19. Ravi is older than Simar by 4 years. Four years from now, the respective ratio between Ravi's age and Simar's age will be 9:8. What will be the Ravi's age 15 years ago? (in years)

- (1) 19
- (2) 36
- (3) 17
- (4) 25
- (5) 21

20. A started a business by investing Rs. 33600. After three month B joined him by investing Rs. 23100. After 3 months of B's investment, C joined them by investing Rs. 18900. If the total annual profit earned by them is Rs. 26450, what is C's share of profit?

- (1) Rs. 4630

- (2) Rs. 4080
- (3) Rs. 4260
- (4) Rs. 4420
- (5) Rs. 4140

21. The sum of two numbers is equal to 27 and their product is equal to 182. What are the two numbers?

- (1) 15, 12
- (2) 11, 16
- (3) 9, 18
- (4) 13, 14
- (5) 19, 8

Direction (Q. Nos. 22-31): What will come in place of question mark (?) in the given questions?

22. $54.2 + 13.52 - 0.52 - 0.5656 - 0.07 = ?$

- (1) 85.44
- (2) 72.12
- (3) 68.32
- (4) 76.14
- (5) 66.57

23.

$$\sqrt{1024} \times 40 + 448 = (?)^3$$

- (1) 8

- (2) 14
- (3) 16
- (4) 12
- (5) 22

24. $(24 \times 16/15 + 32.4)/? = 4$

- (1) 18
- (2) 14.5
- (3) 12
- (4) 16.5
- (5) 15.5

25. $255.4 + 542.3 - ? = 1014.3 - 499.4$

- (1) 271.5
- (2) 290.5
- (3) 220.10
- (4) 244.8
- (5) 282.8

26.

$$2\frac{1}{5} \times \frac{1\frac{2}{5}}{4\frac{2}{5}} = ?$$

(1) $\frac{5}{14}$ (2) $\frac{5}{8}$ (3) $\frac{3}{10}$ (4) $\frac{8}{25}$

(5) $\frac{14}{20}$

27. $0.5 \times 5.6 + 2.5 \times 8.5 + 164.85 = ?$

- (1) 186.95
- (2) 188.9
- (3) 182.35
- (4) 183.8
- (5) 185.6

28. $(0.3 + 0.9 + 0.06)(0.4 + 0.4 + 0.05) = ?$

- (1) 0.936
- (2) 0.693
- (3) 0.369
- (4) 0.963
- (5) 0.639

29. $120\% \text{ of } 675 + 92 = ?\% \text{ of } 124444440 + 716$

- (1) 20
- (2) 15
- (3) 16
- (4) 10
- (5) 12

30.

$$\frac{\left(\sqrt{\frac{81}{25}}\right) - \sqrt{\left(\frac{144}{121}\right)}}{\left(\sqrt{\frac{1681}{484}}\right)} = ?$$

- (1) $\frac{1}{25}$
- (2) $\frac{3}{11}$
- (3) $\frac{1}{5}$
- (4) $\frac{2}{5}$
- (5) $\frac{1}{11}$

31.

$$\frac{(0.6)^3 - (0.4)^3}{(0.6)^3 + (0.4)^3} = ?$$

- (1) $\frac{19}{36}$ (2) $\frac{18}{35}$
- (3) $\frac{19}{35}$ (4) $\frac{18}{37}$
- (5) $\frac{20}{37}$

Directions (32-36): Study the table and answer the given questions.

Store / Months	P	Q	R	S	T
March	213	200	195	253	229
April	156	208	216	187	175
May	177	197	185	181	215
June	220	145	235	265	231
July	253	188	278	243	249

32. Number of books sold by store P in May is approximately what percent less than the number of books sold by store T in July?

- (1) 35
(2) 25
(3) 21
(4) 29

(5) 40

33. What is the respective ratio between the total number of books sold by store P in April and June together and total number of books sold by store T in May and July together?

- (1) 49 : 58
- (2) 49 : 54
- (3) 47 : 58
- (4) 43 : 52
- (5) 47 : 54

34. If 30% of the total number of books sold by store Q, S and T together in April were Academic books, how many non-academic books were sold by the same stores together in the same month?

- (1) 389
- (2) 413
- (3) 381
- (4) 373
- (5) 399

35. What is the average number of books sold by store R in April, June and July together?

- (1) 243
- (2) 241
- (3) 233

(4) 237

(5) 239

36. What is the difference between total number of books sold by store Q in May and July together and total number of books sold by store in S in March and June together?

(1) 129

(2) 127

(3) 143

(4) 133

(5) 136

37. A train 350 m long takes 36 seconds to cross a man running at a speed of 5 km/h in the direction opposite to that of train. What is the speed of the train?

(1) 30 km/h

(2) 40 km/h

(3) 24 km/h

(4) 34 km/h

(5) Other than those given as options

38. A person invested some money at the rate of 6% simple interest. At the end of three years, he got Rs. 900 as SI. If interest is put at the rate of compound interest annually, how much more interest would he get in three years?

(1) Rs. 38.13

(2) Rs. 25.33

- (3) Rs. 55.08
- (4) Rs. 35.30
- (5) Other than those given as options

39. Raju purchases 550 ml of milk everyday. If cost of 1 litre of milk is Rs. 44, how much amount will he pay in 45 days?

- (1) Rs. 1098
- (2) Rs. 1079
- (3) Rs. 1099
- (4) Rs. 1088
- (5) Other than those given as options

40. Neha scored 1.2 times as many marks in Science as in Sanskrit and in Social Science. She scored 20 more marks than Science. If she secured 85.5% marks in these three subjects out of a total 600 marks (in the given three subjects only), how much did she score in Social Science?

- (1) 194
- (2) 174
- (3) 170
- (4) 185
- (5) Other than those given as options